

AMENDMENT AFTER FINAL REJECTION

The Examiner's rationale in the Office Action mailed April 2, 2003, has been carefully considered. However, it is felt that further amendment of the claims is not warranted at this time.

The claims presently in the case:

1. (Previously Amended) A method of improving the uniformity of etching of a film having a plurality of solder bumps on an article, the method comprising the steps of:

immersing the article containing the film having a plurality of solder bumps into a tank of etchant;

rotating the article while in the etchant for an amount of time so as to cause improved uniformity of etching of the film across the entire article compared to etching without rotating the article; and

removing the article from the tank of etchant.

2. (Original) The method of claim 1 wherein the step of rotating comprises sequentially rotating the article.
3. (Previously Amended) The method of claim 1 wherein the step of sequentially rotating comprises rotating the article [a predetermined] an amount but less than a complete rotation, etching the article an amount of time, and repeating the steps of rotating and etching for an amount of time.
4. (Previously Amended) The method of claim 1 wherein the step of rotating comprises continuously rotating the article an amount of time.
5. (Original) The method of claim 1 wherein in the step of rotating, the article is rotated at a speed of 1 to 5 revolutions per minute.
6. (Original) The method of claim 1 wherein the film is a metallic film.
7. (Original) The method of claim 1 wherein the film is a nonmetallic film.

8. (Previously Amended) A method of improving the uniformity of etching of a film having a plurality of solder bumps on a semiconductor wafer, the method comprising the steps of:

immersing the semiconductor wafer containing the film having a plurality of solder bumps into a tank of etchant;

rotating the semiconductor wafer while in the etchant for an amount of time; and

removing the semiconductor wafer from the tank of etchant.

9. (Original) The method of claim 8 wherein the step of rotating comprises sequentially rotating the semiconductor wafer.

10. (Previously Amended) The method of claim 8 wherein the step of sequentially rotating comprises rotating the semiconductor wafer an amount but less than a complete rotation, etching the semiconductor wafer an amount of time, and repeating the steps of rotating and etching for an amount of time.

11. (Previously Amended) The method of claim 8 wherein the step of rotating comprises continuously rotating the semiconductor wafer an amount of time.
12. (Original) The method of claim 8 wherein in the step of rotating, the semiconductor wafer is rotated at a speed of 1 to 5 revolutions per minute.

Claim 13. (Canceled)

14. (Original) The method of claim 8 wherein the film is a metallic film.
15. (Original) The method of claim 8 wherein the film is a nonmetallic film.